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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/611,968	07/03/2003	Herve Burgaud	06028.0020-00	3634

22852 7590 03/22/2007  
FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER  
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WASHINGTON, DC 20001-4413

EXAMINER
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ELHILO, EISA B

ART UNIT	PAPER NUMBER
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1751

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/22/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/611,968

Applicant(s)

BURGAUD ET AL.

Examiner

Eisa B. Elhilo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 and 12-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 9, 10 and 12-36 is/are rejected.
- 7) ☒ Claim(s) 7 and 8 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

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### DETAILED ACTION

1 This action is responsive to the amendment filed on March 1, 2007.

2 A request for continued examination under 37 CFR 1.114, including the fee set forth in  
37 CFR 1.17(e), was filed in this application after final rejection. Since this application is  
eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e)  
has been timely paid, the finality of the previous Office action has been withdrawn pursuant to  
37 CFR 1.114. Applicant's submission filed on 3/1/2007 has been entered.

3 The cancellation of claim 11 is acknowledged. Pending claims are 1-10 and 12-36.

#### *Claim Rejections - 35 USC § 103*

4 The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all  
obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6, 9-10 and 12-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over  
Hoeffkes et al. (US 2002/0059682 A1) in view of Rudolf Benshein (US 3,634,013).

Hoeffkes et al. (US' 682 A1) teaches a hair dyeing composition comprising primary  
alcohol ethanol as an aldehyde precursor as claimed in claims 1, 6 and 9 (see page 11, paragraph,  
0211), 0.001 to 1% of at least one enzyme of alcohol oxidase as claimed in claim 5 (see page, 1,  
paragraph, 0014 and page 7, paragraph, 0129), at least one heteroaromatic hydrazones (see page  
2, paragraph, 0018), oxidation base of para-phenylenediamine in the amount of 0.2% as claimed  
in claims 13-14 (see page 2, paragraph, 0019 and page 14, paragraph, Example 10), oxidation  
coupler of resorcinol in the amount of 0.07% as claimed in claims 15-16 (see paragraph, 14,

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Example 10), direct dyes (substantive dyes) as claimed in claim 17 (see page 7, paragraph, 0127) and other oxidizing agent as claimed in claim 18 (see page 7, paragraph, 0129). Hoeffkes et al. (US' 682 A1) also teaches a method for dyeing hair comprising applying to the hair the dyeing composition as described above and after mixing the dyeing composition with the oxidizing composition (enzyme composition), the mixture is applied to the hair and left for 30 minutes and then rinsed out as claimed in claims 19-35 (see

The disclosure of Hoeffkes et al. (US' 682 A1) as described above, does not teach the claimed formula of the heteroaromatic hydrazones.

However, Hoeffkes et al. (US' 682 A1) clearly suggests the use of heterocyclic hydrazones in a hair dyeing composition (see page 2, paragraph, 0018).

Rudolf Benshein (US' 013) teaches in analogous art of hair dyeing formulation, a composition comprising a heterocyclic hydrazones compound having a formula similar to the claimed formula as claimed in claim 1 (see col. 2, the upper formulae) and wherein the amount of the heterocyclic hydrazones is 0.5 to 7% which within the claimed range as claimed in claim 12 (see col. 7, line 14).

Therefore, in view of teaching of the secondary reference, one having ordinary skill in the art at the time the invention was made would be motivated to modify the dyeing composition of Hoeffkes et al. (US' 682 A1) by incorporating the heterocyclic hydrazones compound as taught by Rudolf Benshein (US' 013) to make such a composition. Such a modification would be obvious to one having ordinary skill in the art because the primary reference of Hoeffkes et al. (US' 682 A1) suggests the use of heterocyclic hydrazones in the hair dyeing composition (see page 2, paragraph, 0018). Rudolf Benshein (US' 013) as a secondary reference clearly teaches

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the claimed formula of heterocyclic hydrazones compound and thus, a person of the ordinary skill in the art would be motivated to incorporate the claimed hydrazones as taught by Rudolf Benshein (US' 013) in the dyeing composition of Hoeffkes et al. (US' 682 A1) with a reasonable expectation of success for improving the dyeing properties of the composition and would expect such a composition to have similar properties to those claimed, absent unexpected result.

With respect to claims 2-4, it would have been obvious to one having ordinary skill in the art at the time the invention was made to formulate a dyeing composition comprising alcohol oxidase enzymes derived from any plant species to arrive at the claimed invention because Hoeffkes et al. (US' 682 A1) teaches similar hair dyeing composition comprising alcohol oxidase enzymes obtained from *Stachybotrys* species (see page 1, paragraph, 0012), and, thus, a person of the ordinary skill in the art would expect that alcohol oxidases as aldehyde generators would have similar properties in the dyeing compositions no matter from which source these enzymes are derived, and, would expect such a composition to have similar properties to those claimed, in the absence of contrary.

With respect to claim 36, it would have been obvious to one having ordinary skill in the art at the time the invention was made to separate the dyeing ingredients by utilizing a multi-compartment device because the reference clearly teaches that the enzyme preparation is mixed to the dyeing precursors (dyeing composition) directly prior to dyeing hair (see page 11, paragraph, 0235), which implies that the enzyme composition is kept separately from the dyeing composition, and, thus, a person of the ordinary skill in the art would utilize such a device in order to separate the dyeing composition from the enzymatic composition (oxidizing

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composition), and would expect such a composition to have similar properties to those claimed, absent unexpected results.

***Allowable Subject Matter***

5 Claims 7 and 8 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The prior art of record do not teach or disclose a hair dyeing formulation comprising aldehyde precursors chosen the claimed amino acid species as claimed.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eisa B. Elhilo whose telephone number is (571) 272-1315. The examiner can normally be reached on M - F (8:00 -4:30).

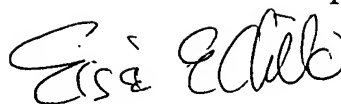
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas McGinty can be reached on (571) 272-1029. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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A handwritten signature in black ink, appearing to read 'Eisa Elhilo', written in a cursive style.

Eisa Elhilo

Primary Examiner

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March 15, 2007